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15 UNITED STATES DISTRICT COURT  
16 NORTHERN DISTRICT OF CALIFORNIA  
17 SAN FRANCISCO DIVISION

18  
19 AYLUS NETWORKS, INC.,

CASE NO. 3:13-cv-04700-EMC

20 Plaintiff,

**DEFENDANT APPLE INC.'S  
SUPPLEMENTAL CLAIM  
CONSTRUCTION BRIEF**

21 v.

22 APPLE INC.,

Date: Nov. 10, 2014

23 Defendant.

Time: 2:30 p.m.

Place: Courtroom 5, 17th Floor

Judge: Honorable Edward M. Chen

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Pursuant to the Court's October 20, 2014 Order (Dkt. No. 82), Defendant Apple Inc. ("Apple") submits this supplemental brief regarding the proper construction of the five Apple-designated claim terms of U.S. Patent No. RE 44,412 (the "'412 patent"). The Court should adopt Apple's constructions of these five claim terms for the reasons previously set forth in Apple's responsive claim construction brief, which will not be repeated here. Apple's present brief instead addresses the erroneous arguments made in Aylus's reply claim construction brief.

## I. **CORRECT CONSTRUCTIONS OF THE APPLE-DESIGNATED CLAIM TERMS**

### A. **"negotiate media content delivery between the MS and the MR"** **(claims 1, 2, 20, 21 and 27)**

<b>Apple's Proposed Construction</b>	<b>Aylus's Proposed Construction</b>
Compare transfer protocols and content formats supported by each of the MS and MR to select a transfer protocol and content format supported by both, and instruct the MS and MR to transfer media content between them using the selected transfer protocol and data format.	Plain and ordinary meaning. Alternative construction: Coordinate transport of audiovisual content from the MS to the MR.

Aylus's argument begins with the false premise that Apple's construction somehow limits the patent to UPnP. Aylus Reply Br. at 2-5. This is incorrect. There is no reference to UPnP, or to any UPnP standard protocol command, in Apple's construction. In fact, Apple's construction recites the claimed negotiation in a manner that can be carried out by non-UPnP devices. For example, Apple's construction does not require any UPnP-specific commands or function calls that would prevent a non-UPnP device from performing functionality described by the construction. Apple Br., Ex. 1 ('412 patent) at Figs. 15 (step 1512), 17 (step 1709); Ex. 16 at 8-9.

What Apple's construction does do is identify what one of ordinary skill in the art understood the claimed negotiation of media content between the MS and the MR to be in light of the patent's claims and specification, which is precisely the goal of claim construction. Such skilled artisans recognized that the embodiments of the alleged invention that are recited in the claims are expressly described in the patent specification as an "extension" of the existing UPnP AV architecture (Apple Br., Ex. 1 at 17:7-8, 17:60-63; Kou Decl. at ¶¶ 21-22; Polish Decl. at ¶ 19; Apple Br. at 3), and such artisans also understood from their knowledge and experience in the field that the claimed negotiation process comprised at least what is set forth in Apple's proposed

1 construction. Kou Decl. at ¶¶16-18, 27-28; Apple Br. at 5-7. In this regard, it is telling that  
2 Aylus does not cite any part of the '412 patent specification as allegedly describing the claimed  
3 negotiation process inconsistently with Apple's proposed construction – because there is no such  
4 conflicting teaching in the specification. One of ordinary skill in the art would therefore have no  
5 reason to understand that the claimed negotiation process does not include the most basic aspects  
6 of the well-understood negotiation process of the UPnP architecture, an architecture that was  
7 "extended" by the patent into the wide area network environment without any need to modify the  
8 basic aspects of the negotiation process described in Apple's construction.

9       Although Aylus changed its tune in its reply brief, Aylus's own opening brief begins by  
10 correctly stating that "[i]n order to understand the patent at issue in this case it is important to  
11 understand the technological background at the time of invention." Aylus Op. Br. 1. Aylus then  
12 describes UPnP and its architecture, after which it states that Aylus had, at the time of the alleged  
13 invention, "recognized the shortcomings inherent in the traditional UPnP architecture" and  
14 "transform[ed] UPnP" in a manner that addressed the alleged shortcomings. *Id.* at 1-3. These  
15 assertions underscore that one of skill in the art would read the patent claims in light of the UPnP  
16 architecture. Moreover, and perhaps more importantly, neither Aylus nor the patent contend that  
17 one of the alleged "shortcomings" of UPnP that needed to be addressed by Aylus's alleged  
18 invention was the negotiation process described in Apple's construction.

19       Aylus next notes that the terms "media server" and "media renderer" are also used outside  
20 the context of UPnP. *Id.* at 3-4. However, this observation is entirely beside the point given that  
21 the claimed embodiments are an "extension" of the UPnP architecture and that one of skill in the  
22 art would read the claims in light of that architecture. *Id.* at 3-5. What matters, therefore, is how  
23 those terms are used in the context of UPnP, not some other unrelated technology.

24       Aylus next points to dependent claims 17 and 18 and two passages from the specification  
25 as describing non-UPnP technologies such as Jini, RFID, and Bluetooth. *Id.* at 4 (citing '412  
26 patent at 6:38-40, 10:3-6, claims 17-18). This is a classic red herring argument as none of these  
27 four citations discusses negotiating media content delivery between the MS and the MR, which is  
28 the claim term at issue. Instead, they each discuss the separate step of device detection, where

1 devices determine what other devices are accessible via their network by, for example, sending  
2 presence announcements. *E.g., id.* at 4 (“the MS and MR announce their presence,” “[a]ssociated  
3 devices may announce their presence,” etc.); Apple Br., Ex. 13 at 9 (describing device discovery  
4 as a different function than negotiation of media content delivery). Tellingly, although Aylus’s  
5 citations establish that the patent applicants knew how to cite non-UPnP methods when they were  
6 relevant to their invention, the patent contains no such suggestion with respect to the fundamental  
7 aspects of the media content delivery negotiation that are described in Apple’s construction.

8 Aylus next argues that UPnP negotiation of media content delivery may differ from  
9 Apple’s construction, citing a passage of the UPnP AV Architecture specification that states that  
10 UPnP components “may interact with each other using the standard UPnP control protocols (*e.g.*,  
11 SOAP over HTTP) or using some private communication mechanism.” Aylus Reply Br. at 5  
12 (citing Ex. 7 at 6). But Aylus fails to cite the very next sentence of the specification, which  
13 states: “In either case, the function of each logical entity remains unchanged.” Aylus Reply Br.,  
14 Ex. 7 at 6 (emphasis added). Thus, whether the UPnP devices communicate using standard UPnP  
15 protocols or other protocols, the same function is still performed. Significantly, Apple’s  
16 construction recites the relevant function (comparing and matching transfer protocols and content  
17 formats), not a specific protocol (*e.g.*, SOAP over HTTP) to be used to accomplish the function.

18 Similarly, Aylus cites an irrelevant portion of a UPnP specification that explains that the  
19 “PeerConnectionManager” parameter of a call to the “PrepareForConnection” function may be  
20 left blank if a non-UPnP device is involved in a connection for media content delivery. Aylus  
21 Reply Br. at 5 (citing Ex. 8 at 15). Notably, Aylus never explains what this parameter is used for  
22 or how it supposedly is relevant to Apple’s construction. In fact, whether this particular  
23 parameter is blank is irrelevant to Apple’s construction, which does not require calling any  
24 specific function, let alone calling a specific function with specific values for the function’s  
25 parameters. Moreover, the cited parameter is just one of four parameters provided to one of many  
26 function calls, and therefore is hardly the “fundamental UPnP functionality” that Aylus claims it  
27 is. *Id.* at 5; *id.*, Apple Br., Ex. 8 at 8 (showing four input parameters).

28 Aylus next argues that the UPnP specifications are extrinsic evidence because there is no

1 evidence the Examiner considered them. But the Examiner himself cited the Hayes prior art  
2 reference into which the UPnP specifications were incorporated, and “[w]e must presume the  
3 Examiner did his job.” Apple Br. at 4 (showing the Examiner cited Hayes); *Amgen Inc. v.*  
4 *Hoechst Marion Roussel, Inc.*, 314 F.3d 1313, 1327 (Fed. Cir. 2003). Accordingly, it should be  
5 presumed that the Examiner reviewed the entirety of the Hayes reference. Moreover, even if the  
6 UPnP specifications were extrinsic instead of intrinsic evidence (which they are not), they are  
7 nonetheless undoubtedly highly instructive as previously explained. *See* Apple Br. at 4-5.

8 Finally, while Aylus devotes four pages of its reply brief to attacking Apple’s  
9 construction, it gives scant attention to, and provides no actual support for, its own construction.  
10 Aylus Reply Br. at 6-7. First, although Aylus proposes to give this claim term its “plain and  
11 ordinary meaning,” neither Aylus nor its expert explain what that meaning is. That is because  
12 Aylus wishes this term to be an undefined black box that can be satisfied by anything. Aylus next  
13 proposes that if the Court does not give the term its plain and ordinary meaning (whatever Aylus  
14 thinks that is), then the Court should adopt Aylus’s construction. However, rather than provide  
15 any meaning to the word “negotiate,” Aylus’s construction simply replaces the word “negotiate”  
16 with the word “coordinate.” Aylus provides no support whatsoever for this proposed word swap,  
17 and instead simply (1) cites to passages of the specification that use the term “negotiate” and (2)  
18 has its expert opine that Aylus’s “coordination” construction is correct without providing any  
19 explanation in support of that opinion. *Id.*; Wigdor Decl. at ¶¶ 24, 38. Moreover, Aylus’s  
20 unsupported “coordination” construction effectively is no construction at all, as it would provide  
21 no guidance whatsoever to the jury as to the meaning and scope of this claim term.

22       **B.     “resides in the signaling domain” (claims 1, 20, and 27)**

<b>Apple’s Proposed Construction</b>	<b>Aylus’s Revised Proposed Construction</b>
Is involved only in commands and instructions and never receives any media content.	Is involved only in commands and instructions and is not in the media path.

26       Faced with the compelling prosecution disclaimer arguments made by Apple in support of  
27 its construction, Aylus’s reply brief abandons Aylus’s prior construction of this claim term in  
28 favor of its present construction. Aylus Reply Br. at 7 n.4. Although the parties’ constructions

1 are now close – both begin “[i]s involved only in commands and instructions and” – Apple  
2 requests that the Court adopt its construction because the balance of that construction is more  
3 accurate and will provide clearer guidance to the jury. In this regard, “claim construction is a  
4 matter of resolution of disputed meanings and technical scope, to clarify and when necessary to  
5 explain, what the patentee covered by the claims.” *O2 Micro Int’l. Ltd. v. Beyond Innovation*  
6 *Tech. Co., Ltd.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008).

7        While the balance of Aylus’s construction adopts part of its prosecution history disclaimer  
8 (“is not in the media path”), Aylus literally ignores a similar, but clearer part of its disclaimer  
9 (“never actually receives any content”). Apple Br. at 9 (showing the relevant prosecution history  
10 excerpt). Both of these phrases describe the same concept, but the phrase included in Apple’s  
11 construction is more precise and easier to understand. Specifically, the fact that the CP does not  
12 reside “in the media path” means that the CP “never actually receives any content.” *Id.* Aylus  
13 clearly admitted this during prosecution in order to obtain its patent, and it should be held to that  
14 admission now. *Id.*

15 Aylus argues that Apple’s construction is “not faithful to the prosecution history.” Aylus  
16 Reply Br. at 7-8. This argument rings hollow because Apple’s construction is taken verbatim  
17 from the prosecution history disclaimer except for two minor, and entirely sound changes. First,  
18 Apple removed the word “actually” from the disclaimer that the CP “never actually receives any  
19 content.” If the Court concludes that the construction would be more accurate with the inclusion  
20 of the word “actually,” Apple has no objection to its inclusion. Second, Apple changed the word  
21 “content” from the disclaimer language to “media content” in order to mirror the language of the  
22 claims, each of which also refers to “media content.” Apple Br., Ex. 1 at claims 1, 20, 27.

**C. “cooperate with [network control point/the serving node] CP logic” (claims 1, 20, and 27)**

Apple's Revised Proposed Construction	Aylus's Proposed Construction
<p>The CPP logic communicates with <u>at least</u> one of the MS and MR, and the CP logic communicates with <u>at least</u> the other of the MS and MR.</p>	<p>Plain and ordinary meaning. Alternative construction: Work with CP logic to coordinate transport of audiovisual content from the MS to the MR.</p>

Pointing to what it apparently perceived to be an ambiguity in Apple's initial proposed

1 construction, Aylus incorrectly argues that Apple’s initial construction required that the CPP logic  
2 communicate with only one of the MS and MR, and the CP logic communicates with only the  
3 other of the MS and MR. Aylus Reply Br. at 8-9. But Apple’s initial construction did not recite  
4 the word “only” and did not otherwise impose such a requirement. Apple’s initial construction  
5 was instead intended to require that the CPP logic communicate with at least one of the MS and  
6 MR, and the CP logic communicate with at least the other of the MS and MR – requirements that  
7 Aylus’s own reply brief emphasizes exist in the claims. *Id.* at 8-9. However, for the avoidance of  
8 any doubt on this issue, Apple has modified its proposed construction to expressly recite the “at  
9 least” language in both clauses of the construction (Apple’s revised construction is shown above  
10 with the new language underlined).

11 Aylus also argues that dependent claims 2 and 4 conflict with Apple’s construction  
12 because they contemplate that either the CPP logic (claim 2) or the CP logic (claim 4) may  
13 communicate with both the MS and the MR. *Id.* at 9. But this argument, too, is based on Aylus’s  
14 misreading of Apple’s construction and therefore fails for the same reasons. Namely, Apple’s  
15 construction of this phrase in claim 1 allows each of the CPP logic and the CP logic to  
16 communicate with both the MS and MR. Dependent claim 2 simply adds a requirement that the  
17 CPP logic in fact communicate with both the MS and MR (not just at least one of the MS or MR),  
18 and dependent claim 4 does the same with respect to the CP logic. These dependent claims are  
19 therefore fully consistent with Apple’s construction. Aylus’s similar arguments based on  
20 specification passages that describe the CPP logic or CP logic communicating with both the MS  
21 and MR also fail for the same reasons.

22 Finally, Aylus again devotes almost its entire argument concerning this claim term to  
23 attacking Apple’s proposed construction, and provides both scant attention to, and no support for,  
24 its own construction. In this regard, Aylus’s construction replaces the claim phrase “cooperate  
25 with” with the phrase “work with,” but cites no evidence – intrinsic or extrinsic – that supports  
26 this word swap. *Id.* at 10 (instead quoting language from the specification that addresses the  
27 “negotiation” that is the subject of the first claim term addressed in this brief). Aylus also  
28 provides no explanation of how the phrase “work with” provides any more guidance or clarity

1 than the claim language “cooperate with.” It does not. Apple’s proposed construction, on the  
2 other hand, provides clear meaning to the claim term, and with the addition of the “at least”  
3 language to Apple’s proposed construction, Aylus apparently has no dispute with the substance of  
4 Apple’s construction.

5       **D.     “the CP logic … serves as a [first/second] proxy” (claims 1, 20, and 27)**

<b>Apple’s Proposed Construction</b>	<b>Aylus’s Proposed Construction</b>
The CP logic accepts control messages from the CPP and passes them on to the MS or MR.	Plain and ordinary meaning. Alternative construction: The control point logic acts as an authorized actor.

9           Aylus’s arguments concerning this claim term lack any merit. First, while Aylus purports  
10 to take issue with Apple’s reliance on the Dictionary.com definition of “proxy” that the Examiner  
11 of the ’753 patent stated was “the accepted meaning of a ‘proxy,’” the sole evidentiary support  
12 that Aylus cites for its own construction is another definition of “proxy” from the same  
13 Dictionary.com reference. Aylus Reply Br. at 10-11; Apple Br., Ex. 6 (Dictionary.com reference  
14 from the ’753 file history). Aylus therefore acknowledges the propriety of relying on the  
15 Dictionary.com reference for purposes of construing this claim term.

16           The Examiner, whose statements reflect the understanding of one of ordinary skill in the  
17 art (Apple Br. at 12), correctly pointed to the only definition of “proxy” in the context of  
18 computing systems that was present on the Dictionary.com site – the definition provided by the  
19 “The Free On-line Dictionary of Computing” – as being “the accepted meaning of a ‘proxy.’”  
20 Apple Br., Ex. 5. By contrast, Aylus – without the support of the Examiner, its expert, the named  
21 inventors or anyone else who might have knowledge on this issue – points to a definition of  
22 “proxy” that is wholly unrelated to computing (or any other technology) and that instead pertains  
23 to a person who is a proxy. Aylus Reply Br. at 11 (citing definition of “proxy” as “the agency,  
24 function, or power of a person authorized to act as the deputy or substitute of another.”)  
25 (emphasis added). Aylus fails to explain (because it cannot) how a definition of proxy that  
26 pertains to a person can be more germane to the correct construction of this technical claim term  
27 than a definition of “proxy” that pertains to computer systems.

28           Aylus’s complaint that Apple’s construction does not simply repeat the dictionary

1 definition verbatim also lacks merit. Aylus Reply Br. at 10-11. Specifically, Apple's initial brief  
2 explains in detail how and why it adapted the Examiner's definition of "proxy" to describe what it  
3 means for the claimed "CP logic" to be a "proxy" in the context of the claimed invention, an  
4 explanation that is solidly rooted in the claims and specification. Apple Br. at 12-13.

5       **E.     "serving node" (claims 1, 15, 20, 27)**

<b>Apple's Proposed Construction</b>	<b>Aylus's Proposed Construction</b>
A node configured to establish an IMS session with the UE.	Plain and ordinary meaning. Alternative construction: A serving element in the wide area network.

9           Aylus argues that Apple's construction reads into the claims a limitation that was removed  
10 during prosecution when Aylus amended the claims to remove the word "IMS" from various  
11 instances of "IMS network." Aylus Reply Br. at 12-13. But Aylus's prosecution amendments are  
12 irrelevant to Apple's construction because Apple's construction addresses only what the claimed  
13 serving node is, not the type of networks on which it may reside. Apple does not dispute that the  
14 recited "network[s]" are not limited to IMS networks, and Apple's construction allows the  
15 serving node and UE to reside on non-IMS networks, consistent with Aylus's amendments.

16           Moreover, the Federal Circuit resolved a nearly identical fact pattern when it determined  
17 that although the term "kiosk" was deleted from claims during prosecution, the claims could not  
18 be entirely divorced from kiosks because the specification described the use of a kiosk as the  
19 invention itself and consistently described the invention as having characteristics of a kiosk.

20 *Decisioning.com, Inc. v. Federated Dept. Stores, Inc.*, 527 F.3d 1300, 1309-11 (Fed. Cir. 2008);  
21 Apple Br. at 17. Likewise, the '412 patent describes "the invention" itself as being in an IMS  
22 environment, and consistently uses the term "serving node" to refer to a node configured to  
23 establish IMS sessions. Apple Br. at 14-16.

24           Aylus also argues that Apple's construction is inconsistent with the specification by first  
25 pointing to the disclosure of a handset that can operate on a Public Switched Telephone Network  
26 ("PSTN"). Aylus Reply Br. at 13-14. But the fact that a handset can operate on a PSTN does not  
27 preclude the handset from also connecting to an IMS network. Figure 1 depicts exactly that  
28 because it shows that the UE (handset) resides in a PSTN network and also accesses IMS services

1 via the connection to the P-CSCF component of the IMS architecture. Apple Br., Ex. 1 at Fig. 1,  
2 3:39-40 (describing a UE operating on the “PSTN” (also quoted in Aylus’s Reply Br. at 14)),  
3 3:42-44 (describing P-CSCF as “the first point of contact for a UE (handset) in an IMS network”).  
4 Further, there is nothing “incongruent” about Apple’s proposed constructions of “handset” and  
5 “serving node” (Aylus Reply Br. at 14) because Apple’s construction of “handset” simply  
6 requires that a handset be capable of operating on a Public Switched Telephone Network, and  
7 does not preclude a handset from also using IMS as described in the specification.

8 Aylus also cites “out-of-band” protocols used for media delivery between the MS and MR  
9 as supposedly conflicting with Apple’s construction. Aylus Reply Br. at 14. But the protocols  
10 that may be used to transport content between the MS and MR are irrelevant to communications  
11 between two other claimed elements, the “serving node” (which contains the CP logic) and the  
12 “UE” (which contains the CPP logic). Apple’s construction fully allows the MS and MR to  
13 communicate using non-IMS, “out-of-band” protocols, consistent with the patent. *Id.* The  
14 specification even explains that IMS separates control from content delivery, to enable “‘out-of-  
15 band’ media transport under the control of IMS.” Apple Br., Ex. 1 at 15:50-57.

16 Finally, Aylus’s construction should be rejected. Aylus proposes that the Court give  
17 “serving node” its plain and ordinary meaning, but Aylus fails to identify what that plain and  
18 ordinary meaning is. Aylus Reply Br. at 13-14. Aylus also proposes an alternative construction  
19 that replaces “serving node” with “serving element” and then parrots words from the claims,  
20 thereby providing no guidance or clarity to a jury. *O2 Micro*, 521 F.3d at 1362; Apple Br. at 17.

21 **II. CONCLUSION**

22 For the foregoing reasons, Apple respectfully requests that the Court adopt Apple’s  
23 constructions of the five Apple-designated claim terms.

24 Dated: October 24, 2014

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27 Attorneys for Defendant Apple Inc.

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